

#### ENVIRONMENTAL QUALITY MANAGEMENT, INC.

1310 Kemper Meadow Drive • Suite 100 Cincinnati, Ohio 45240

(513) 825-7500 FAX (513) 825-7495

February 19, 2001

Mr. Mark Durno U.S. Environmental Protection Agency 25089 Center Ridge Road Westlake, Ohio 44145

Re: EPA Contract No. 68-S5-9801 Delivery Order No. 9801-05-065 Mahoningside Power Plant Site Warren, Ohio COC # 5-25953

Dear Mr. Durno

Enclosed, please find the original data package for the samples taken at the above referenced site on October 20, 2000. The samples were received at Assay Technology in Boardman, OH on October 20, 2000. The samples were analyzed for Asbestos fibers by PCM method NIOSH 7400. The data package was sent to Environmental Quality Management, Inc. (EQ) upon completion of the analysis for a preliminary review. It appears that all the information in the data package has been provided and no quality issues were identified by the laboratory or EQM.

Per your request, data validation has not been performed on the data package. The preliminary review was based upon method requirements and the OSWER Directive. If you have any questions regarding this report, please feel free to contact me at 800-500-0575.

Sincerely,

ENVIRONMENTAL QUALITY MANAGEMENT, INC.

Mark Jarski

Analytical Coordinator

Enclosure



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## The Technology Leader in Personal Monitoring for Chemicals in the Workplace

#### QA LEVEL II DATA PACKAGE

Analysis: Asbestos Fiber Count by PCM

Method: NIOSH 7400, Issue 2; "A" Rules

AT LABS Billing Control #: 2000100621

Laboratory Sample ID#'s: 2000035671 - 2000035676

Project Narrative: 25mm MCE filter cassettes samples were submitted for analysis by NIOSH method 7400. This method gives a count of airborne fibers using phase contrast microscopy (PCM). Counting is by the "A" rules counting along the total fiber length. Fiber lengths greater than 5um are counted, however fiber diameters less than 0.25um will not be detected by this method. This method is used in the evaluation of asbestos exposure, but cannot differentiate asbestos fibers from other fibers. Identification of fibers is possible by electron microscopy (NIOSH method 7402). Two field blanks per set of samples are recommended. Air sampling information was provided by the client.

Holding times: Samples are stable indefinitely.

Date Collected: 20 OCT 2000
Date received: 23 OCT 2000
Date analyzed: 25 OCT 2000
Date reported: 25 OCT 2000

Analytical Results:

Samples: see attached reports
Detection Limit: 0.055 Fibers/fld

Laboratory Blank:

Zero fibers counted in 100 fields



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QUALITY CONTROL INFORMATION

DAILY P.A.T.COUNT: Each analyst must count a PAT (Proficiency Analytical Testing) slide before counting fibers for the day to demonstrate proficiency of the method. The percent recovery is plotted on the "DAILY PAT COUNT CONTROL CHART" and must meet AT LABS quality assurance standards.

DAILY PAT COUNT RECOVERY: Keith Bickel 90%

DAILY Q.C.RECOUNTS: Verification of fiber counting accuracy will be assured by recounting 10% of all samples counted each day. The difference of the recount fibers from the original count fibers will be plotted on "DAILY Q.C. RECOUNT CHARTS" and must meet AT LABS quality assurance standards.

DAILY MICROSCOPE SET-UP: Each analyst will set their scope and verify phase shift and record this in the logbook for the specific microscope used.

### AT LABS

250 DeBartolo Pl., Suite 2525 Youngstown, OH 44512

# FIBER COUNT WORKSHEET NIOSH ANALYTICAL METHOD NUMBER 7400

(A RULES)

ACCESSION NO: 100621 CO	MPANY: EQH
COLLECTION DATE: SAI	MPLE I.D.: 35671
MICROSCOPE: Leitz: Labrolux D Total magni	ification 400x GRATICULE: Walton -Beck
KOEHLER ILLUMINATION PHASE SHIFT TEST SI SET: YES NO	LIDE: SETS 6 & 7 INVISIBLE: YES N SET 3 RESOLVED: YES N
FIELD AREA = .00785MM <sup>2</sup> (Af)	FILTER AREA = 385MM <sup>2</sup> (Ac)
FIBERS EACH FIELD	CALCULATIONS  Time - minutes (t)
Total Fibers 6.5 No. Fields 100 Fifld 0.065	Ficw rate - L/min $(r)$ Blank - F/fld $(B)$ Sample - F/fld $(F)$ Fibers / $cc = \frac{Ac}{1000 \text{ Af}} \left(\frac{F}{r} - \frac{B}{x}\right)$ 49.045
ADDITIONAL INFORMATION:	RESULT: FIBERS / cc
	ANALYST KRB  DATE 10-25-2000

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# FIBER COUNT WORKSHEET NIOSH ANALYTICAL METHOD NUMBER 7400

	(A RULES)
ACCESSION NO: 100621 (	COMPANY: EQM
COLLECTION DATE:	SAMPLE I.D.: 35672
MICROSCOPE: Leitz: Labrolux D Total ma	gnification 400x GRATICULE: Walton -Bed
KOEHLER ILLUMINATION PHASE SHIFT TEST SET: YES NO	SLIDE: SETS 6 & 7 INVISIBLE: YES SET 3 RESOLVED: YES
FIELD AREA = .00785MM <sup>2</sup> (Af)	FILTER AREA = 385MM <sup>2</sup> (Ac)
FIBERS EACH FIELD	CALCULATIONS  Time - minutes (t)
Total Fibers 2 No. Fields 100 F. fld 0.02	Flow rate - L/min (r)
ADDITIONAL INFORMATION:	RESULT: FIBERS / cc
	ANALYST KRB .

DATE 10-25-2000

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# FIBER COUNT WORKSHEET NIOSH ANALYTICAL METHOD NUMBER 7400

1	(A RULES)

ACCESSION NO: 100621	co	MPANY: EQM
COLLECTION DATE:	SA	MPLE I.D.: 35673
	_	ification 400x GRATICULE: Walton -Bed
SET: YES NO  FIELD AREA = .00785MM <sup>2</sup> (Af		SET 3 RESOLVED: YES  FILTER AREA = 385MM <sup>2</sup> (Ac)
FIBERS EACH FIELD		CALCULATIONS
Total Fibers 14 No. Fields 100 F.	ifld 0.14	Time - minutes (t)  Flow rate - L/min (r)  Blank - F/fld (B)  Sample - F/fld (F)  Fibers / cc = Ac
ADDITIONAL INFORMATION:		RESULT: FIBERS / cc
		ANALYST KRB +

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# FIBER COUNT WORKSHEET NIOSH ANALYTICAL METHOD NUMBER 7400 (A RULES)

	ACCESSION NO: 100621 CO	OMPANY: EQH
	COLLECTION DATE: SA	AMPLE 1.D.: 35674
MICR	OSCOPE: Leitz: Labrolux D Total mag	nification 400x GRATICULE: Walton -Beck
KOEI SET:	HLER ILLUMINATION PHASE SHIFT TEST S YES NO	SLIDE: SETS 6 & 7 INVISIBLE: YES SET 3 RESOLVED: YES
	FIELD AREA = .00785MM <sup>2</sup> (Af)	FILTER AREA = 385MM <sup>2</sup> (Ac)
	FIBERS EACH FIELD	CALCULATIONS
		Time - minutes (t)
		Ficw rate - L/min (r)
		Blank - F/fld (B)
		Sample - F/fid (F)
		Fibers / cc = $\frac{Ac}{1000 \text{ Af}}$ $\left(\frac{F}{r} - \frac{B}{x}\right)$ $49.045 \left(\frac{F}{x} - \frac{B}{x}\right)$
Tota	al Fibers 15.5 No. Fields 100 F.fld 0.155	
ADI	DITIONAL INFORMATION:	RESULT: FIBERS / cc
		ANALYST KRB . *

DATE 10-25-2000

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# FIBER COUNT WORKSHEET NIOSH ANALYTICAL METHOD NUMBER 7400 (A RULES)

ACCESSION NO: 100621 CO	MPANY: EQM
•	MPLE I.D.: 35675
MICROSCOPE: Leitz: Labrolux D Total magni	fication 400x GRATICULE: Walton -Beck
KOEHLER ILLUMINATION PHASE SHIFT TEST SI SET: YES NO	LIDE: SETS 6 & 7 INVISIBLE: YES SET 3 RESOLVED: YES
FIELD AREA = .00785MM <sup>2</sup> (Af)	FILTER AREA = 385MM <sup>2</sup> (Ac)
FIBERS EACH FIELD	CALCULATIONS  Time - minutes (t)
Total Fibers 4 No. Fields 100 F.fld 0.06	Flow rate - L/min (r)  Blank - F/fld (B)  Sample - F/fld (F)  Fibers / cc = $\frac{Ac}{1000 \text{ At}}$ ( $\frac{F}{r}$ $\frac{B}{x}$ t
ADDITIONAL INFORMATION:	RESULT: FIBERS / cc
	ANALYST KRB

DATE 10-25-2000

250 DeBartolo Pl., Suite 2525 Youngstown, OH 44512

# FIBER COUNT WORKSHEET NIOSH ANALYTICAL METHOD NUMBER 7400

(A RULES)

	ACCES	SSIO	4 NO	):		100	62		cc	MPANY: EQM		
	COLLE	ECTIC	DN D.	ATE:	·				SA	MPLE I.D.:35	676	
											GRATICULE: Walton	
											INVISIBLE: YES RESOLVED: YES	:
		FIEL	D A	REA	= .007	785M	M <sup>2</sup>	(Af)		FILTER AF	REA = 385MM <sup>2</sup> (Ac)	<del></del> -
		F	IBER	IS EA	ACH F	FIELD	)			C	CALCULATIONS	
		<del></del>	· · · · · ·	- 1			1		1	Time - mir	nutes (t)	<del></del>
		1						<u> </u> 		Flow rate - L	_/min (r)	
										Blank -	F/fld (8)	- 
							<u> </u>	<u> </u>	1	Sample -	F/fld (F)	
				-							1	`
									}	Fibers / co =	$\frac{Ac}{1000 Af} \qquad \left(\frac{F}{r} - \frac{1}{x}\right)$	B_
											<u> </u>	, ,
										49.045	<u>-</u>	
												1
Total	Fibers	s	0	_ No	. Field	ds <u>(</u>	0U	. F <sub>i</sub> fl	d <u>(700</u>	-		
ADDITIONAL INFORMATION:								RESULT:	FIBERS	/ cc		
											·	
										ANALYST KR	B . *	
										DATE IN 16	1000	

**REGION 5** 

77 West Jackson Boulevard FAX513-825-9728 **CHAIN OF CUSTODY RECORD** 200010062/ Chicago, Illinois 60604 PROJECT NAME **Activity Code:** PROJ. NO. QA Level II Mahoningside Power Plant NO. T.A.T 14 verbal/21 hard SAMPLERS: (Print Name and Sign)
1 Helly Smith Hally Smith
Jeff Kimble Sample OF Send & For Result to! Jockie Dean GO EOM
1310 Kenper Meadawit 200-550 Concu, Oh 45 240 800-500-0578
CLINCU, TAG NUMBERS (513)825-978 CON-**TAINERS** COMP STA. NO. DATE TIME STATION LOCATION 2000 QA+ 480min × 2016/min = 967.684 MP-A-01 10/20/00 15734 Sumo DZ (4.1) 035671 2000-10/20/00 0735 035672 480min x 2.036 4min = 977.04L Decembra LL UP-A-02 2000-480min x 2.09754min = 10068L MP A-03 Pada 12738 035673 2000-480 min x 2.0485 /min = 983.281 MP-A-04 Pluba 0738 035674 2000-MP-A-05 Propo 0740 480min x 2.02554min - 972,242 SPACEMMAN (444- Backensons) 035675 2000-MP-A-B 10/20/20 Blank 0740 035676 2000-IGA DATA PKC. 035677 Belinquished by: (Signature) Date / Time Received by: (Signature) Ship To: Assay Tech 250 Debartalow Place Soute 2525 Boordman, Oh 10/20/00 Relinquished by: (Signature) Date / Time ATTN: Dan Lipton 330-758-0830 Relinquished by: (Signature) Received for Laboratory by: Date / Time Date / Time (Signature) Chain of Custody Seal Numbers Distribution: White - Accompanies Shipment; Pink - Coordinator Field Files; Yellow - Laboratory File

### LABORATORY REPORT (Phase Contrast Microscopy Fiber Count)

Batch No: 2000100621

Customer: ENVIRONMENTAL QUALITY MANAGEMENT

Attention: MARK JARSKI

Address: 1310 KEMPER MEADOW DR

STE 100

City, State: CINCINNATI, OH 45240-1651

Country:

Tel No: (800) 229-7495 Fax No: (513) 825-9728

Client No: 39392

Project No:

PO No: MAHONINGSIDE POWER PLANT

Date Received: October 23, 2000

Date Reported: October 25, 2000

Date(s) Analyzed:

10/25/00

Phase Contrast Microscopy fiber count results reported as Fibers/Field. Air concentration (Fibers/CC) reported if Sample Volume has been provided by Client. ND = None Detected at or above the detection limit. Please contact Technical Support at 1-800-833-1258 with any inquiries within 30 days.

				Sample	Quantity Found	<b>Quantity Found</b>	<b>Detection Limit</b>
Lab Sample ID	Date Sampled	Client Sample ID	Chemical Analyzed	Volume (L)	(Fibers/Field)	(Fibers/CC)	(Fibers/Field)
2000035671	10/20/00	MP-A-01/ SUMP D2 (4FT)	ASBESTOS, FIBERS BY PCM	968	0.065	0.0033	0.055
2000035672	10/20/00	MP-A-02/ DECON AREA (4FT)	ASBESTOS, FIBERS BY PCM	977	ND	< 0.003	0.055
2000035673	10/20/00	MP-A-03/ WORKER	ASBESTOS, FIBERS BY PCM	1007	0.14	0.0068	0.055
2000035674	10/20/00	MP-A-04/ WORKER	ASBESTOS, FIBERS BY PCM	983	0.155	0.0077	0.055
2000035675	10/20/00	MP-A-05/ EPA COMMAND (4FT BACK	ASBESTOS, FIBERS BY PCM	972	0.06	0.003	0.055
2000035676	10/20/00	MP-A-B/ BLANK	ASBESTOS, FIBERS BY PCM		ND		0.055
Messages		•					
Lab Sample ID	Message		Chemical Analyzed	Method Name		Analyzed By	Approved By
			ASBESTOS, FIBERS BY PCM	NIOSH 7400		W. EWING	

Results Reviewed by Employee: (Initials/Date) K. Daylon 10/25/00